IN THE CLAIMS:

1. (Currently amended) ~~An~~ A selected monoclonal antibody, or fragment thereof, wherein:
the selected monoclonal antibody, or fragment thereof, has been selected for its ability to bind ~~binds~~ to an epitope ~~under~~ at a first ~~conditions~~ pH of between about 6 and 8; and
the selected monoclonal antibody, or fragment thereof, has also been selected such that the bond of the selected monoclonal antibody, or fragment thereof, to the epitope is broken ~~under~~ at a second ~~conditions,~~ pH within a range of between about 4 and 6 or another range of between about 8 and 8.5.
~~wherein both the first conditions and the second conditions lie within physiologically acceptable limits of a human or an animal body.~~

2. (Currently amended) The selected monoclonal antibody, or fragment thereof, of claim 1, wherein the selected monoclonal antibody, or fragment thereof, is coupled to a diagnostically, therapeutically or cosmetically active substance.

3-5. (Canceled).

6. (Currently amended) The selected monoclonal antibody, or fragment thereof, of claim ~~3~~ 1, wherein:
the first ~~conditions are at a~~ pH ~~of~~ is about 7~~; and~~
~~the second conditions are at a pH within a range of between about 4 and about 7 or another range of between about 7 and about 8.5~~.

7-8. (Canceled).

9. (Currently amended) The selected monoclonal antibody, or fragment thereof, of claim 1, wherein the ~~first conditions and the second conditions~~ ability of the selected monoclonal antibody, or fragment thereof, to bind to the epitope has been further selected ~~are~~ dependent upon ion strength ~~or pH~~.

10. (Currently amended) The selected monoclonal antibody, or fragment thereof, of claim 9, wherein:

~~the first conditions are~~ a first ion strength at which the selected monoclonal antibody binds the epitope is within a range of between about 0 M and about 13 M; and

~~the second conditions are~~ a second ion strength at which the bond between the selected monoclonal antibody and the epitope is broken is within the range of between about 0 M and about 13 M;

wherein the second ion strength is different than first ion strength.

11. (Currently amended) The selected monoclonal antibody, or fragment thereof, of claim 9, wherein:

the first ~~conditions are at an~~ ion strength is within a range of between about 0 mM and about 500 mM; and

the second ~~conditions are at an~~ ion strength is within a range of between about 1 M and about 13 M.

12. (Canceled).

13. (Currently amended) The selected monoclonal antibody, or fragment thereof, of claim 1, wherein the selected monoclonal antibody, or fragment thereof, is selected from a group consisting of a F(ab), F(ab)', $F(ab)'_2$ and an scFv.

14. (Currently amended) The selected monoclonal antibody, or fragment thereof, of claim 1, wherein ~~said~~ the selected monoclonal antibody, or fragment thereof, is capable of use in a targeted or temporary diagnostic, therapeutic and cosmetic treatment of externally accessible parts of the human or the animal body.

15. (Currently amended) The selected monoclonal antibody, or fragment thereof, of claim 14, wherein said targeted or temporary diagnostic, therapeutic or cosmetic treatment comprises a treatment of an oral cavity of the human or the animal body.

16. (Currently amended) The selected monoclonal antibody, or fragment thereof, of claim 15, wherein ~~said~~ the selected monoclonal antibody, or fragment thereof, is capable of bleaching teeth and molars included in said oral cavity.

17. (Currently amended) The selected monoclonal antibody, or fragment thereof, of claim 15, wherein ~~said~~ the selected monoclonal antibody, or fragment thereof, is capable of detecting plaque in said oral cavity.

18. (Currently amended) The selected monoclonal antibody, or fragment thereof, of claim 15, wherein ~~said~~ the selected monoclonal antibody, or fragment thereof, is capable of removing plaque in said oral cavity.

19. (Currently amended) The selected monoclonal antibody, or fragment thereof, of claim 14, wherein said targeted or temporary diagnostic, therapeutic or cosmetic treatment comprises a treatment for fighting infections in externally accessible parts of the human or the animal body.

20. (Currently amended) The selected monoclonal antibody, or fragment thereof, of claim 2, wherein the diagnostically, therapeutically or cosmetically active substance comprises an enzyme.

21. (Currently amended) The selected monoclonal antibody, or fragment thereof, of claim 20, wherein the enzyme is selected from the group consisting of an oxidase, a peroxidase, a protease, a cell-wall lysing enzyme and a plaque matrix inhibitor.

22. (Currently amended) The selected monoclonal antibody, or fragment thereof, of claim 21, wherein the enzyme comprises an oxidase selected from the group consisting of glucose oxidase, lactase oxidase and uric acid oxidase.

23. (Withdrawn) The antibody, or fragment thereof, of claim 21, wherein the enzyme comprises an oxidase chosen from a group consisting of glucose oxidase, lactase oxidase and uric acid oxidase.

24. (Currently amended) The selected monoclonal antibody, or fragment thereof, of claim 21, wherein the enzyme comprises the protease and is selected from the group consisting of papain, pepsin, trypsin, ficin and bromelin.

25. (Withdrawn) The antibody, or fragment thereof, of claim 21, wherein the enzyme comprises lysozyme.

26. (Withdrawn) The antibody, or fragment thereof, of claim 21, wherein the enzyme comprises a plaque matrix inhibitor chosen from a group consisting of dextranase and mutanase.

27. (Currently amended) The selected monoclonal antibody, or fragment thereof of claim 2, wherein the diagnostically, therapeutically or cosmetically active substance comprises a fluorescent or radioactive substance.

28. (Currently amended) The selected monoclonal antibody, or fragment thereof, of claim 2, wherein the selected monoclonal antibody, or fragment thereof, is capable of binding an epitope of a pathogenic micro-organism or other pathogenic compound.

29. (Currently amended) The selected monoclonal antibody, or fragment thereof, of claim 28, wherein said pathogenic micro-organism is selected from the group consisting of Actinomyces actinomycetem comitans, Porphyromonas gingivalis, Prevotella intermedia, Streptococcus mutans, Bacteroides forsythus, Eikenella corrodens, Treponema denticola, Campylobacter lectus, and Fusobacterium nucleatum.

30. (Currently amended) A composition comprising:
at least one selected monoclonal antibody, or fragment thereof, of claim 1; and
at least one physiologically acceptable diluent, solvent or carrier.

31. (Previously presented) The composition of claim 30, wherein the composition is selected from the group consisting of a teeth cleaning agent, mouthwash, mouth spray, chewing tablet, chewing gum, cream and ointment.

32. (Canceled).

33. (Currently amended) The selected monoclonal antibody, or fragment thereof, of claim ~~12~~ 1, wherein the first pH is about 7.4 and the second pH is about 4.5.

34. (Currently amended) The selected monoclonal antibody, or fragment thereof, of claim ~~12~~ 10, wherein the ~~first pH is about 7.4, the second pH is about 4.5 and~~ the second ion strength is equivalent to about 1 M NaCl.

35. (Currently amended) The selected monoclonal antibody, or fragment thereof, of claim ~~12~~ 10, wherein ~~the first pH is about 8.5,~~ the first ion strength is about 1 M NaCl and the second ion strength is about 0 M.

36. (Currently amended) The selected monoclonal antibody, or fragment thereof, of claim ~~12~~ 10, wherein ~~the first pH is about 8.5,~~ the second pH is about 4.5 ~~and the second ion strength is about 1 M NaCl~~.

37. (Currently amended) The selected monoclonal antibody, or fragment thereof, of claim 1, wherein the epitope is of a *Staphylococcus epidermidis* origin.

38-39. (Canceled).

Please add the following new claims:

40. (New) A selected monoclonal antibody, or fragment thereof, wherein:

the selected monoclonal antibody, or fragment thereof, has been selected for its ability to bind to an epitope at a first pH of about 8.5 and a first ion strength of between about 0M and 13M; and

the selected monoclonal antibody, or fragment thereof, has also been selected such that the bond of the selected monoclonal antibody, or fragment thereof, to the epitope is broken at a second pH within a range of between about 4.5 and 8.5 and a second ion strength of between about 0M and 13M;

wherein the second ion strength is different than the first ion strength.

41. (New) The selected monoclonal antibody, or fragment thereof, of claim 40, wherein the first ion strength is about 1M NaCl and the second ion strength is about 0M.

42. (New) The selected monoclonal antibody, or fragment thereof, of claim 40, wherein the second pH is about 4.5 and the second ion strength is about 1M NaCl.

43. (New) The selected monoclonal antibody, or fragment thereof, of claim 40, wherein the epitope is of a *Staphylococcus epidermidis* origin.